

SZMIGIEL, Czesław

Behaviour of the total iodine content in healthy infants.
Pediat. Pol. 40 no.6:593-600 Je '65.

1. Z II Kliniki Chorob Dzieci AM w Krakowie (Kierownik:
prof. dr. med. B. Halikowski) i z Zakładu Patologii Ogólnej
i Doswiadczałnej AM w Krakowie (Kierownik: prof. dr. med.
B. Giedosz).

SZMIGIEL, Zbigniew

Incomplete antileukocyte antibodies in leukemia patients.
Pol. tyg. lek. 20 no.18:639-640 3 My '65.

1. Z III Kliniki Chorob Wewnetrznych AM w Krakowie (Kierownik:
prof. dr. J. Aleksandrowicz).

SZMIGIELSKI, Stanisław

Physiology, pathology and metabolism of leukocytes. Postepy
hig. med. dosw. 19 no.3:333-351 My-Je '65.

1. Z Kliniki Hematologicznej Instytutu Hematologii w Warszawie
(Kierownik: prof. dr. W. Lawkowicz).

LITWIN, Joanna; SZMIGIELSKI, Stanislaw; ZUPANSKA, Barbara

Histochemical studies of the activity of nonspecific esterases
in blood and bone marrow cells. Pol. arch. med. wewn. 35 no.5:
647-652 '65.

1. Z Kliniki Hematologicznej Instytutu Hematologii w Warszawie
i z Katedry Hematologii Studium Doskonalenia Lekarzy w Warszawie
(Kierownik: prof. dr. med. W. Lawkowicz).

SZMOLA, Imre

Role of the Council of Mutual Economic Assistance in the factories
of Borsod County. Borsod Szemle 7 no.5:20-32 '63.

1. Tudományos Ismeretterjesztő Társulat Borsod megyei Titkara;
"Borsodi Szemle" szerkesztő bizottsági tagja.

1
SZMOLA, Imre

For modernizing the dissemination of scientific knowledge.
Borsod szemle 7 no.3:1-4 '63.

1."Borsodi Szemle" szerkeszto bizottsagi tagja; Tudomanyos
Ismeretterjeszto Tarsular Borsod megyei titkara.

SZMOLA, Imre

Preparations for the general meeting. Borsod szemle 8 no.1:
83-84 '64.

1. Tudományos Ismeretterjesztő Társulat Borsod megyei titkara;
"Borsodi Szemle" szerkesztő bizottsági tagja.

SZMOLA, Imre

Future perspectives of the Borsod County Society for Disseminating Scientific Knowledge in the work of the general meeting. Borsod szemle 8 no. 2:1-8 '64.

1. Secretary, Borsod County organization, Society for Dissemination of Scientific Knowledge.

CA SZMOLKA, L.

Calcination of Hungarian dolomites. Lajos Smolka.
Alumina 2, 293 (1930). Calcining expts. were con-
ducted with 17 Hungarian dolomites. In each expt. a 10-g.
sample was calcined 1 hr. at 500-1000° in an elec. furnace.
All the dolomite samples had similar ignition behavior.
Full calcination was conducted at temps. not exceeding
1000°. When the degree of heating of dolomite was examd.
by means of a thermoelement, the curve obtained showed a
steady period at 750-780° where no increase of temp. was
observed due to an endothermic process. During this
period only $MgCO_3$ was decompd., and the period was not
terminated until all the CO_2 of the $MgCO_3$ originally present
in the dolomite was liberated. István Finály

SZMOLKA, L.

Electrolysis of roasted zinc concentrates originating from Gyöngyösorosi (Hungary) from electrolytes manufactured by leaching. Lajos Szmolka and Béla Czeglédi (Fémipari Kutató Intézet, Budapest, Hung.). Fémipari Kutató Intézet Közleményei No. 2, 178-83 (1958).—Tests were conducted to establish the optimum operating conditions for the manuf. of Zn from the electrolyte obtained by leaching the roasted concentrates. Operation at approx. 7 amp./sq. dm. c.d. and Zn concn. of the electrolyte during the operation from an initial 130 to a final 60 g./l., corresponding to an acidity range of 100-200 g. H₂SO₄/l. were recommended to achieve lowest energy consumption.
L. G. Arvai

SZMONIEWSKI, Ryszard; SZMONIEWSKA, Stanisława

The one-point method of determining the liquid limit. Kwartalnik geol 8 no.1:189-198 '64

1. Zakład Geologii Inżynierskiej, Instytut Geologiczny,
Warszawa.

SZMONIEWSKI, Ryszard; SZMONIEWSKA, Stanisława

The one-point method of determining the liquid limit. Kwartalnik geol 8 no.1:189-198 '64

1. Zakład Geologii Inżynierskiej, Instytut Geologiczny,
Warszawa.

SZMORLINSKI, Z., dr inz.; KARWACKI, W., mgr inz.

Analog methods of determining the distribution of heat and the cooling medium in the design of turbogenerators. Przegl elektrotechn 40 no.5:222-223 My '64.

1. Department of Electric Machines, Technical University, Wroclaw.

SZMUK, A.; WEISS, M.

System of indices for agricultural and rural, electrification in Rumania. p. 321.
(ENERGETICA. Vol. 5, no. 6, June 1957, Rumania)

SO: Monthly List of East European Accessions (EEAL) LC. Vol 6, No. 12, Dec. 1957
Uncl.

CA

Determination of the chorionic gonadotropic hormone by use of frogs and its availability as a rapid pregnancy test. Imre Bach, Imre Szuk, Borbála Klinger, and László Róbert. *Orvosi Hetilap* 90, 304-6(1949).—*Rana esculenta* male frogs of body wt. above 80 g. were inoculated subcutaneously by 10% of their body wt. with the urine to be tested. Two hrs. after inoculation urine from the cloaca of the frog was observed under the microscope. In the case of increased hormone sperms could be seen. These sperms disappeared from the urine after 3-4 days and the same frogs were available for further tests. Out of 610 tests 4 were erroneous, others correct (the pos. results all being correct). István Finály

SZMUK, I.

PARADY, Z., SZMUK, I.

New serological test, with special reference to early diagnosis of endocarditis lenta and to the therapeutic evaluation of the effect of administered antibiotics. Orv. hetil. 91:27, 2 July 50, p. 844-5

1. Laboratory (Head Physician—Dr. Imre Szauk), Peterfy Sandor Street Hospital of National Institute for Social Insurance,

CHIL 19, 5, Nov., 1950

SZNUK, I. 1951

"Laboratory use of A Series of Protein Solutions for the Euglobulin Reaction."

Kiserl. Orvostud. Budapest. 1951 3/4(294-296)
Abst: Exc. Med. 11, Vol. 5, No. 10, p. 1182

VIRASZTO, J.; SZMUK, I.; TAKACS, S.; WINKLER, P.

Treatment of carriers of Streptococcus hemolyticus with penicillin-glycerine spray. Orv. hetil. 92 no.11:353 18 Mar 1951. (GLML 24:2)

1. Doctor. 2. Second Surgical Clinic (Director -- Prof. Dr. Dezso Klimko) and First Institute of Anatomy (Director -- Prof. Dr. Ferenc Kiss), Lorand Eotvos University, Budapest.

SZMUK, I.
BACH, I.; SZMUK, I.; GYULAI, E.; VIRANYI, A.

Investigation of the pituitary and adrenal gland system
in experimental fever; new method for eosinophil cell
count. Orv. hetil., Budap. 93 no.35:1117-1125 2 Sep 1951.
(CML 21:1)

1. Internal Department (Head Physician -- Prof. Dr. Imre
Bach) and Laboratory (Head Physician -- Dr. Imre Sz muk),
Peterfy Sandor-utcai Metropolitan Hospital, Budapest.

SZMUK, I.; ERZSEBET, S.

Reliable thrombokinasé production and technic of use. Orv. hetil. 94
no.24:670-671 14 June 1953. (CIML 25:1)

1. Doctors. 2. Laboratory (Head Physician -- Dr. Imre Szmuk), Peterfy
Sandor-u., Metropolitan Hospital Polyclinic (Director-Head Physician --
Dr. Jozsef Lendvai).

SZMUK, I.

Further studies on pathology of the blood proteins. Orv. hetil. 94
no.47:1304-1305 22 Nov 1953. (CML 25:5)

1. Doctor. 2. Laboratory (Head Physician -- Dr. Imre Sz muk), Peterfy
Sandor-utca Hospital-Polyclinic (Director - Head Physician -- Dr. Jozsef
Lendvai).

SEMUK, Imre

FEKETE, Balazs; POPPER, Zsuzsanna; SEMUK, Imre

Complexon III in the determination of metal ions. I. Determination of blood calcium ions. Kiserletes orvostud. 6 no.4:374-377 July 54.

1. A For. Peterfy Sandor-utcai Korhazrendelo Laboratoriuma
(CALCIUM, in blood
determ., ethylenediaminetetraacetic acid)
(ACETIC ACID, deriv.
ethylenediaminetetraacetic acid, determ. of blood calcium)
(BLOOD
calcium, determ., ethylenediaminetetraacetic acid)

GAL, Miklos,; SAJGO, Erzsebet,; SZMUK, Imre.

Plasma labile factor in diseases of the liver and of the biliary tract. Kiserletes orvostud. 7 no.2:192-196 Mar 55.

1. Fovarosi tanacs Peterffy S.U. Korhazrendelo A. Belosztalya es Laboratoriuma.

(BLOOD COAGULATION,

factor V, in biliary & liver dis.)

(BILIARY TRACT, diseases,

factor V in)

FEKETE, Balazs, dr.,; KOMOR, Karoly, dr.,; SZMUK, Imre, dr.

Determination of penicillin in the blood, administration of penicillin per os, and prolonged action of penicillin. Orv. hetil. 96 no.10:264-267 6 Mar 55

1. A Fovarosí Peterfi Sandor utcai Korház-rendelő (igazgató: Lendvai József dr.) Laboratóriumának (főorvos: Smuk Imre dr.) és B.Belcsztalyanak (főorvos Bach Imre dr. az orvostudományok kandidátusa) közleménye.

(PENICILLIN, administration,
oral, prolonged action penicillin)

FROMMER, Edgar, dr.,; SZMUK, Imre, dr.

Nicotine-azobenzene-azoprotein. Orv. hetil. 96 no.13:347
27 Mar 55.

1. A Peterfy S.u.-i korhaz (igazgato: Lendvai Jozsef dr.)
prosecturajanak (osztalyvezeto: Braun Sandor dr.) es laboratoriumanak
(osztalyvezeto Sz muk Imre dr.) kozlemenye.

(NICOTINE, derivatives,
nicotine-azobenzene-azoprotein)

(PROTEINS,
nicotine-azobenzene-azoprotein)

(BENZENE, derivatives,
nicotine-azobenzene-azoprotein)

SZMUK, Imre, dr.; BACH, Imre, dr.; DANZIGER, Laszlo, dr.; FEKETE, Balazs, dr.;
FLEISCHMANN, Laszlo, dr.; JAKO, Geza, dr.; MISSURA, Tibor, dr.;
POPPER, Sauzsanna, dr.; SZABADOS, Daisy, dr.

Use of radioiodine in localization of inflamed regions (foci,
abscesses). Orv. hetil. 97 no.34:949-951 19 Aug 56.

1. A Fovarosí Peterfy Sándor u. Korhazrendelő (igazgató:
Lendvai, József, dr.) közleménye.

(BRAIN, abscess

exper., localization with radioiodine in dogs (Hun))

(IODINE, radioactive

in localization of exper. brain abscesses in dogs (Hun))

SZMUNESS, Wolf (Lublin)

Results of our observations on the etiology and epidemiology of
chronic dysentery. Przegl.epidem. 14 no.3:289-294 '60.
(DYSENTERY BACILLARY)

SZMUNESS, Wolf

Certain epidemiological characteristics of Sonne's type of dysentery.
Przegl.epidem. 14 no.3:295-299 '60.
(DYSENTERY BACILLARY epidemiol)

SZMUNESS, Wolf

Frequency and certain characteristics of inoculation hepatitis.
Polski tygod. lek. 15 no. 42:1608-1613 17 0 '60.

1. Z Instytutu Medycyny Pracy i Higieny Wsi w Lublinie; dyrektor:
prof. dr J. Parnas.
(JAUNDICE HOMOLOGOUS SERUM)

PARNAS, Jozef; SZMUNESS, Wolf; przy wspolpracy CYMERMAN, Haliny

Results of further studies on ornithosis. Przegl. epidem. 15 no.4:
355-363 '61.

1. Z Zakladu Antropozoonoz Instytutu Medycyny Pracy i Higieny Wsi w
Lublinie.

(ORNITHOSIS epidemiol)

SZMUNESS, Wolf

On epidemic hepatitis morbidity among physicians and their families.
Przegl. epidem. 15 no.4:365-372 '61.

1. Z Instytutu Medycyny Pracy i Higieny Wsi i z Wojewodzkiej Stacji
San-Epid. w Lublinie i Poznaniu.

(HEPATITIS INFECTIOUS epidemiol)
(PHYSICIANS dis)

PARNAS, Jozef; SZMUNESS, Wolf; UJDA, Jozef

A case of possible ornithosis. Polski tygod. lek. 16 no.17:641-643
24 Ap '61.

1. Z Zakladu Antropozoonoz i Dzialu Klinicznego Instytutu Medycyny
Pracy i Higieny Wsi w Lublinie; kierownik: prof. dr Jozef Parnas.

(ORNITHOSIS diag)

GAWRONOWA, Helena; HOROCH, Czeslaw; KOZLOWSKA, Teresa; SIKORSKA, Jadwiga;
SZMUNESS, Wolf

An epidemic of water-borne dysentery and diarrhea. Przegl. epidem.
16 no.4:473-478 '62.

1. Z Wojewodzkiej Stacji Sanitarno-Epidemiologicznej w Lublinie Dyrektor:
dr Cz. Horoch.

(DYSENTERY BACILLARY) (DIARRHEA)
(WATER MICROBIOLOGY)

SZMUNESS, Wolf

Analysis of infectious hepatitis in rural areas. Przegl. epidem. 16
no.1:1-11 '62.

1. Z Woj. Stacji San.-Epid. w Lublinie Dyrektor: dr. C. Horoch i z
Instytutu Medycyny Pracy i Higieny Wsi Dyrektor: prof. dr J. Parnas.
(HEPATITIS INFECTIONOUS epidemiol)

POLAND

SZMUNESS, Wolf, Wojewodztwo Station of Sanitation and Epidemiology (Wojewodzka Stacja Sanitarno-Epidemiologiczna) in Lublin (Director: Dr. Cz. HOROCH) and the Institute of Occupational Medicine and Rural Hygiene (Instytut Medycyny Pracy i Higieny Wsi) (Director: Prof. Dr. J. PARNAS)

"Studies on Intra-Family Infections in Epidemic Hepatitis."

Warsaw, Przegląd Epidemiologiczny, Vol 17, No 3, 63, pp 195-206

Abstract: [Author's English summary modified] Analysis of over 5,000 cases revealed that family infections accounted for 1.68% of a total of 5.01% of secondary cases, with rate of cohabitants 4-19 times higher than expected. Intra-familial cases occurred mostly during epidemics, in first months, in rural population, in children, among children or children and their mothers, and depended on hygienic conditions and crowding. They were not subject to seasonal fluctuation, and hospitalization of first patient in family had no influence on intrafamilial incidence. 56 references: 16 Soviet, and about 15 Eastern and 25 Western.

1/1

SZMUNESS, Wolf

An epidemic of inoculation hepatitis among children of a rural school and kindergarten. Pol. tyg. lek. 18 no.24:549-553 10 Je '63.

1. Z Wojewodzkiej Stacji Sanitarno-Epidemiologicznej w Lublinie;
dyrektor: dr Cz. Horoch.

(HEPATITIS, HOMOLOGOUS SERUM) (EPIDEMIOLOGY)
(TYPHOID-PARATYPHOID VACCINE) (DIPHTHERIA TOXOID)

POLAND

SZMUNESS, Wolf, Wojewodztwo Sanitation and Epidemiology Station (Wojewodzka Stacja Sanitarno-Epidemiologiczna) in Lublin (Director: Dr. Cz. HOROCH)

"The Epidemic of Serum Hepatitis Among Children of the School and Kindergarten of the 'Cielesnica" State Farm."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 24, 10 Jun 63, pp 849-853

Abstract: [Author's English summary modified] Author analyzes an epidemic of serum hepatitis in 60 children vaccinated on the same day for typhoid fever and diphtheria with unsterilized syringes and needles. In the school, 25.3 of the vaccinated children were affected, and in the kindergarten 71.4. There were 25 cases with typical, 10 with abortive, and 25 with suspected abortive forms of the diseases. Incubation period was 42-86 days, and no relation was found between it and the age of the child or form of the disease. The clinical form of the disease was mild, and the prodromal period was absent in only two cases. There are 19 references, of which eight (8) are Polish, six (6) English, and five (5) German.

1/1

SZMUNESS, Wolf

Attempted general characterization of the course of infectious hepatitis epidemics in rural areas. Przegl. epidem. 18 no.1: 59-66 '64.

1. Z Woj. Stacji Sanitarno-Epidemiologicznej w Lublinie (Dyrektor: dr. C. Horoch).

SZMUNESS, Wolf

Observations on the epidemiologic effectiveness of quarantining children from the environment of epidemic hepatitis. Przegl. epidem. 18 no.4:453-458 '64.

1. Z Wojewodzkiej Stacji Sanitarno-Epidemiologicznej w Lublinie (Dyrektor: dr. Cz. Horoch).

SZMUNESS, Wolf

Effectiveness of gamma globulin in controlling viral hepatitis.
Pol. tyg. lek. 19 no.45:1734-1736 N 9:64

1. Z Woj. Stacji Sanitarno-Epidemiologicznej w Lublinie.

L 01789-67 T JK
ACC NR: AP6035151

(A)

SOURCE CODE: PO/0081/65/019/002/0198/0199

SZMUNESS, Wolf; Regional Sanitation and Epidemiology Station (Wojewodzka
Stacja Sanitarno-Epidemiologiczna), Lublin.

"Observations on the Epidemiologic Usefulness of .Mandatory Hospitalization
of Patients with Infectious Hepatitis."

Warsaw, Przegląd Epidemiologiczny, Vol 19, No 2, 1965; p 198-199.

Abstract: Analysis of 5,000 cases of infectious hepatitis with special
attention to advantages and disadvantages of mandatory hospitalization.
Author found little to indicate that mandatory hospitalization was
useful in checking the spread of disease; specialized study of 1,000 cases
shows that 90% of these were hospitalized only on the fifth day of the
disease, and no less than 60% as late as the tenth day, i.e. when contagiousness
is already minimal. Presented at the 3rd Scientific Assembly of Polish Epi-
demiologists and Infectologists, Krakow, 5-6 Oct 64. [JPRS]

TOPIC TAGS: epidemiology, hepatitis

SUB CODE: 06 / SUBM DATE: none

Card 1/1 *feh* -

0921 1541

POLAND

SZMUNESS, Wolf; SIKORSKA, Jadwiga; SZYMANEK, Elzbieta; MIKOSZ, Aleksander, and GECNOWICZ, Lucja; Regional Sanitation-Epidemiology Center (Wojewodzka Stacja Sanitarno-Epidemiologiczna,) Head (Dyrektor) C. HOROCH, MD, Lublin.

"Possibilities of Dissemination of Salmonella enteritidis Infections by the Respiratory Route."

Warsaw, Przegląd Epidemiologiczny, Vol 19, No 4, 1965; pp 433-439.

Abstract [English summary modified]: Strains of antibiotic-resistant Salmonella enteritidis were isolated from the throat and nose swabbings of 37 out of a total of 131 children infected with the microbe in five hospital foci. Most were quite young, below 1 year of age. Carrier state was usually permanent. Three tables, 1 Soviet, 16 Western references.

1/1

SEMUNIA SKI, H.

In the heart of the black continent. p. 356.

PRZEBIEG GEODEZYJNY. (Stowarzyszenie Naukowe-Techniczne Geodetow Polskich)
Warszawa. Vol. 15, no. 8/9, Aug/Sept. 1959.

Monthly List of East European Accession (EEAI) IC, Vol. 9, no. 2, Feb. 1960.

Uncl.

OSTROWSKI, Ludwik; SZMURLO, Jarosław ..

Cleidocranial dysostosis. Czas. stomat. 13 no.8/9:955-959
Ag-3 '65.

1. Z II Kliniki Chirurgicznej AM w Białymstoku (Kierownik:
prof. dr. med. T. Jankowski) i z Zakładu Radiologii AM w
Białymstoku (Kierownik: doc. dr. med. S. Boczon).

BENDARZEWSKI, Stanislaw; REUTT, Henryk; SZMURLO, Jaroslaw

Protein metabolism and callus formation in old, adult and young rats. Chir. narzad. ruchu ortop. pol. 29 no.1:5 -11 '64.

1. Z Zakladu Fizjologii AM w Bialymstoku (kierownik: doc.dr. med. R.Kordecki) i z Zakladu Rentgenologii AM w Bialymstoku (kierownik: doc.dr.med. S.Boczon).

POLAND/Chemical Technology - Food Industry.

H-28

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 83353

Author : Debski, S., Sztybel, A.

Inst : -

Title : The Change in the Quality of Apple Juice in the Course of Compressing.

Orig Pub : Przen. spozywczy, 1958, 12, No 4, 147-148.

Abstract : The quality of juice was investigated in the process of compressing at a press load of 1200 kilograms, a final pressure of 10-15 kilograms per cm², and process duration from 30-40 minutes, and it was found that in the extract content at the end of compressing was 0.96% less on the average, as compared to its original content of 7.8 to 12%, and a decrease in acidity by 0.026% as compared to the initial 0.77-0.91% of the juice. The observed phenomenon is explained by the presence in apples of plant cells of various ripeness and it is therefore assumed

Card 1/2

SZMYD, T.

Transistor generator for measuring pruposes. Biuletyn. p. 12.
(PRZEGLAD GORNICZY. Vol. 12, no. 11, Nov. 1956, Katowice, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

SZMID, T.

Some problems concerning electronic measurements in mining engineering. p.467
(PRZEGLAD GORNICZY, Vol. 12, No. 12, Dec. 1956, Stalinogrod, Poland)

SO: Monthly List of East European Accessions (FEAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

S/081/62/000/024/056/073
B166/B186

AUTHORS: Przesmycki, Jan, Szmyd, Tadeusz, Kucharczyk, Wiktor,
Przesmycka, Irena

TITLE: Electronic device for measuring electrophoretic fractions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1962, 510, abstract
24I290 (Polish Patent 45166, Nov. 8, 1961)

TEXT: The patent is for a device which enables simple, quick and practically error-free measurements to be made for quantitative evaluation of electrophoresis patterns. The instrument is designed to convert individual fractions into corresponding values of an electric current, to display the separated fractions on the screen of an oscilloscope, to integrate the results and to present them in a percentage expression. The measuring process takes 3 min, not counting the time taken by the electron tubes to warm up. [Abstracter's note: Complete translation.]

Card 1/1

~~SZMYD~~, Tadeusz, mgr inz.

Possibilities of applying longwall radiotelephones. Wiadom gorn
13 no.10:355-358 0 '62.

SZMYD, Tadeusz, mgr inz.

Transistors and Hall generators as basic semiconductive
elements in mining automation. Wiadom gorn 14 no.1:27-30
Ja '63.

SZMYDT, S.

A generalized problem of Neumann. Annales Pol math 15
no.3:309-325 '64.

1. Institute of Mathematics, Polish Academy of Sciences,
Krakow.

SZMYDT, Z.

"Structure of an Aggregate Produce by Integrals Leading to the Singular Point of a System of Differential Equations." P. 223,
(GEODEZJA I KARTOGRAFIA, Vol. 1, No. 6, 1953, Warszawa, Poland.)
(Polska Akademia Nauk.)

SO: Monthly List of East European Accessions, (EML), LC, Vol. 3,
No. 12, Dec. 1954, Uncl.

SZMYDT, Z

✓ Szmydt, Z. Sur les systèmes d'équations différentielles dont toutes les solutions sont bornées. Ann. Polon. Math. 2 (1955), 234-236 (1956).

A remark concerning the differential system (1) $x' = A(t)x + f(t, x)$, where $A(t)$ is a $n \times n$ matrix with continuous coefficients and $f(t, x)$ is a continuous vector function of t and x , $0 \leq t < \infty$. Let $Y(t)$, $t \geq 0$, denote a fundamental solution of the linear system $y' = A(t)y$. If (a) $\|Y(t)\| \leq M$, $0 \leq t < \infty$; (b) $\|f(t, x)\| \leq g(t)\|x\|$, $\int_0^{+\infty} g(t)dt < +\infty$; (c)

$\|Y(t)Y^{-1}(\tau)\| \leq N$ for all $0 \leq \tau \leq t$, then all solutions of (1) are bounded. II. If (a), (b) hold, and (d) $f(t, Y(t)z) = Y(t)f(t, z)$ for all $t \geq 0$ and vectors z , then all solutions of (1) are bounded. I is an immediate consequence of the reduction of (1) to an integral equation. II follows by a remark of H. Weyl [Amer. J. Math. 68 (1946), 7-12; MR 7, 382]. The norm above, $\| \cdot \|$, is the usual square root of the integral-squares of the elements.

L. Cesari.

1 - F/W

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5

4
301

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5

theory, but the
systems are considered.

2
2
2
2

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

SZMYDT, Z.

Szmydt, Z. On the degree of regularity of surfaces formed by the asymptotic integrals of differential equations.

Ann. Polon. Math. 2 (1955), 294-313 (1956).

The author studies the autonomous differential system (1) $dy/dt = f(y)$, $y = (y_1, \dots, y_n)$, $f = (f_1, \dots, f_n)$, for which the origin is the singular point, i.e. $f(0) = 0$. Also, it is assumed that the characteristic roots of the matrix $C = \|c_{ij}\|$, c_{ij} being the partial derivative of f_i with respect to y_j at the point $y=0$, have the real parts different from zero and two of them have real roots of opposite signs. Let S denote the subset of E_n made up of all trajectories $y=y(t)$ of system (1) tending to the singular point as $t \rightarrow +\infty$. I. G. Petrovskii proved [Mat. Sb. 41 (1934), 107-156] that S is a continuous manifold under general conditions of f . M. Martin [Bull. Amer. Math. Soc. 46 (1940), 475-481; MR 2, 50] proved that S is an analytic manifold if f is analytic. In the present paper the author proves that S is a manifold of class C^p if f is of class C^p , $p \geq 1$.

L. Cesari (Lafayette, Ind.)

1
Math 1-F/W

[Handwritten signature]

SZMYDT Z.

Szmydt, Z. Sur un nouveau type de problèmes pour un système d'équations différentielles hyperboliques du second ordre à deux variables indépendantes. Bull. Acad. Polon. Sci. Cl. III 4:1956: 67-72.

The author considers for a vector function $U(x, y)$ in a rectangle R a system of two hyperbolic differential equations $L_1 U = F_1$, $L_2 U = F_2$ with boundary conditions $U|_{\Gamma} = U_0$ and $U|_A = U_1$ at a given point x_0 for Problem I requires the same on Γ and $\Gamma \cup B_1$ on A . The constant U_0 and the continuous functions G, H, F_1, F_2 are given in the above problems. It is shown that the system is solvable and at least one solution exists using Schauder's fixed point theorem.

1-FW

1/2

Smydt, Z.

2

The detailed assumptions needed for the proofs are formulated for problem II and a special case of I. These conditions are consistent with the assumptions of problem I even if the assumptions of problem I are not satisfied. I-F/W

and U_0, G, H must be $N \times N$ matrices for the case that G and H are $N \times N$ matrices and U_0 is $N \times N$ (see Detroit, Mich). 72

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

proof depending on Schauder's fixed point theorem.

Hartman (Baltimore, Md.)

Szmydt, Z. Sur l'existence de solutions de certains nouveaux problèmes pour un système d'équations différentielles hyperboliques du second ordre à deux variables indépendantes. Ann. Polsh. Math. 4 (1957), 40-60.

Let R be the rectangle $|x| \leq a$, $|y| \leq b$; and let $y = \gamma(x)$ for $|x| \leq a$, $x = \lambda(y)$ for $|y| \leq b$ be two continuous arcs in R . For a vector $u = (u^1, \dots, u^n)$, let $|u| = \max(|u^1|, \dots, |u^n|)$. Let $F(x, y, u, p, q)$, $G(x, u, q)$, $H(y, u, p)$ be continuous vector functions defined for (x, y) in R and $|u|, |p|, |q| \leq r$. Let u_0 be a constant vector and $|u_0|, |G|, |H| \leq c < r$. The author is concerned with the question of the existence of functions $u(x, y)$ of class C^1 with continuous mixed derivatives u_{xy} satisfying $u_{xy} = F(x, y, u, u_x, u_y)$, $u(x_0, y_0) = u_0$, $u_x(x, y) = G(x, u(x, y), u_y(x, y))$ for $y = \gamma(x)$ and either

(I) $u_y(x, y) = H(y, u(x, y), u_x(x, y))$ for $x = \lambda(y)$, or

(II) $u(\lambda(y), y) = u_0 + \int_{y_0}^y H(t, u(\lambda(t), t), u_x(\lambda(t), t)) dt$.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

6.2) 1/2 conditions on the F, G, H satisfy uniform Lipschitz conditions with respect to $(p, q), q, p$, respectively, with sufficiently small Lipschitz constants, then the problem (I) has a solution and if, in addition, $\lambda(y)$ is of class C^1 , then problem (II)

Szmydt, Z.

has a solution on R . Several variants of this result are given. For example, if in problem (1), G does not depend on q , or if $\gamma(x) \equiv \text{const}$, the Lipschitz condition on F can be replaced by a condition of the form $|F(x, y, u, p, q) - F(x, y, u, p^*, q^*)| \leq w_1(y, |p - p^*|, x) + w_2(x, |q - q^*|, y)$, where $w_1(s, v, t)$ are continuous, nondecreasing in v and the initial value problems $dv/ds = \pm w_1(s, v, t)$, $v(s_0) = 0$ for fixed t, s_0 have the unique solution $v \equiv 0$. [See also Ciliberto, Ricerche Mat. 4 (1955), 15-29; MR 17, 621.] The proofs depend on Schauder's fixed-point theorem.

P. Hartman (Baltimore, Md.)

Gib
2/2

Szmydt

Szmydt, Z. Sur le problème Goursat concernant les équations différentielles hyperboliques du second ordre. Bull. Acad. Polon. Sci. Cl. III. 5 (1957), 571-575, XLEX. (Russian summary)

Let $f(x, y, z, p, q)$ be continuous for $|x|, |y| \leq \alpha$ and arbitrary z, p, q and satisfy a uniform Lipschitz condition with respect to (z, p, q) . Let $\gamma(t), \delta(t), \sigma(t), \tau(t)$ be of class C^1 for $|t| \leq \alpha$; $\sigma(0) = \tau(0) = |\gamma(t)|, |\delta(t)| \leq \alpha$; $\gamma(0) = \delta(0) = 0$; and $(\max |\gamma'(t)|)(\max |\delta'(t)|) < 1$. The author gives a proof for the following: if $\beta > 0$ is sufficiently small, the problem $z_{xy} = f(x, y, z, z_x, z_y), z(x, \gamma(x)) = \sigma(x), z(\delta(y), y) = \tau(y)$ has a unique solution $z(x, y)$ for $|x|, |y| \leq \beta$, possessing continuous partial derivatives z_x, z_y, z_{xy} . As in the case of the Darboux problem, the existence (but not the uniqueness) statement remains valid if the Lipschitz condition with

respect to z is omitted [cf. Hartman and Wintner, Amer. J. Math. 74 (1952), 834-864; MR 14, 475; Ciliberto, Ricerche Mat. 4 (1955), 15-29; MR 17, 621; Szmydt, Bull. Acad. Polon. Sci. Cl. III. 4 (1956), 579-584; MR 18, 741]. The proof depends on an application of the Schauder fixed-point theorem and can be generalized to the case where z and f are vectors. P. Hartman.

On the Problem of Goursat on the Second Order Hyperbolic Differential Equation.

Szmydt, Z. Sur un problème concernant un système d'équations différentielles hyperboliques d'ordre arbitraire à deux variables indépendantes. Bull. Acad. Polon. Sci. Cl. III. 5 (1957), 577-582, XLIX. (Russian summary)

*Let u be a vector and $u_{ij} = \partial^{i+j} u / \partial x^i \partial y^j$. By the methods used in the paper reviewed above, the author obtains existence and uniqueness theorems for solutions of the partial differential equation $u_{mp} = f(x, y, u, \dots, u_{ij}, \dots)$, where $0 \leq i+j < m+p$, $0 \leq i \leq m$, $0 \leq j \leq p$, subject to conditions of the form: $u_{mj}(x, y) = g_j(x, u(x, y), \dots, u_{ik}(x, y), \dots)$ on an arc $y = \gamma_j(x)$, where $1 \leq j \leq p$, $i+k < m+p$ and $0 \leq i < m$; and $u_{ip}(x, y) = h_i(y, u(x, y), \dots, u_{kj}(x, y), \dots)$ on an arc $x = \delta_i(y)$, where $1 \leq i \leq m$, $k+j < m+p$ and $0 \leq j < p$. In these conditions, $y = \gamma_j(x)$ and $x = \delta_i(y)$ are given arcs and $g_j(x, u, u_{ik}, \dots)$, $h_i(y, u, \dots, u_{kj}, \dots)$ are given functions of the independent variables $(x, u, \dots, u_{ik}, \dots)$, $(y, u, \dots, u_{kj}, \dots)$, respectively.

P. Hartman (Los Angeles, Calif.).

On a Problem Concerning a System of Hyperbolic Differential Equations of Arbitrary Order in Two Independent Variables.

Szmydt, Z. Sur l'existence de solutions de certains problèmes aux limites relatifs à un système d'équations différentielles hyperboliques. Bull. Acad. Polon. Sci. Sér. Sci. Math. Astr. Phys. 6 (1958), 31-36. 2

Let $y=\gamma(x)$ and $x=\lambda(y)$ be two continuous curves in a

rectangle D of the plane. Let U, P, Q denote n -vectors and suppose that $F(x, y, U, P, Q)$, $G(x, U, Q)$, and $H(y, U, P)$ are continuous functions for (x, y) in D and U, P, Q arbitrary. It is desired to find a solution for the system, denoted by 14

$$U_{xy} = F(x, y, U, U_x, U_y),$$

and satisfying the conditions

$$U(x_0, y_0) = U_0, \text{ a constant vector;}$$

$$U_x = G(x, U, U_y) \text{ on } y = \gamma(x);$$

$$U_y = H(y, U, U_x) \text{ on } x = \lambda(y).$$

It is assumed that F, G , and H do not grow faster than a linear function in U, P, Q and satisfy Lipschitz conditions in P, Q with suitably small coefficients. The proof uses J. Schauder's theorem on fixed points [Studia Math. 2 (1930), 171-180]. 15

R. G. Bartle (Urbana, Ill.)

WOLSKA-BOCHENEK, J., doc. dr.; SZMYDT, Z. doc. dr.

Witold Pogorzelski's 45th anniversary of scientific work.
Rocz wiad matem 5:29-37 '61.

SZMYDT, Z. (Krakow)

On a certain boundary problem for Laplace equation. Annales pol math
11 no.1:27-48 '61.

(Integral equations)

34907

011/002/001/002

16-3400

AUTHOR: Szmydt, Z. (Kraków)

TITLE: Non-linear perturbations which do not augment the maximum increase of integrals

SOURCE: Polska Akademia Nauk. Instytut Matematyczny. Annales polonici Mathematici, v. 11, no. 2, 1961, 143 - 148

TEXT: The author considers a system of linear differential equations written in vectorial form

$$\frac{dw}{dt} = A(t) x, \quad (1)$$

and a perturbed system

$$\frac{dy}{dt} = A(t)y + r(t, y), \quad (2)$$

where A is a square matrix, whose elements a_{ij} are functions of t, continuous for $t \geq 0$. The problem Q to be considered is: If $x(t)$ is

Card 1/3

Non-linear perturbations which do ...

2/286/01/011/002/001/002
D25/5555

the fundamental matrix of (1) does there exist for each integral $y(t)$ of (2) at least one corresponding integral $x(t)$ of (1) such that

$$y(t) = O(\|X(t)\|) \quad (3)$$

It is stated that if Q has an affirmative answer, then the increase of any integral of (2) cannot surpass the maximum increase of the integrals of (1) determined by that of $\|X(t)\|$ and all the integrals of (2) are bounded, provided that those of (1) are bounded. It is shown that by Theorem 1: If $f(t, y)$ is continuous for $t \geq 0$ (y arbitrary), and $g(t)$ is a non-negative summable function ($t \geq 0$) such that

$$\|f(t, y)\| \leq g(t)\|y\| \quad t \geq 0 \quad (5)$$

and

$$\int_0^{\infty} \|X(t)\| \|X^{-1}(t)\| g(t) dt < \infty, \quad (6)$$

then Q has an affirmative answer. Theorem 2: If W is the fundamental matrix of

$$dw/dt = B(t)w \quad (9)$$

Card 2/3

Non-linear perturbations which do ...

7/508/61/011/002/001/002
2251/7503

and $f(t, z)$ is a continuous vectorial function ($t \geq 0$, z arbitrary)
and $h(t)$ is a summable function, non-negative for $t \geq 0$, and if

$$\|f(t, z)\| \leq h(t)\|z\| \text{ for } t \geq 0, \int_0^{\infty} h(t)dt < \infty \quad (10)$$

and $r[t, W(t)y] = W(t)f(t, y)$ for $t \geq 0$, (11)

then Q has an affirmative answer for (9) and

$$dz/dt = B(t)z + f(t, z). \quad (12)$$

It is shown that a theorem of R. Bellman follows as a corollary of Theorem 1. There are 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: R. Bellman, On a generalization of a result of Wintner, Quarterly of Applied Mathematics, 16, 1959, 431-432; L. Cesari, Asymptotic behavior and stability problems in ordinary differential equations, Springer-Verlag, 1959.

ASSOCIATION: Instytut matematyczny Polskiej Akademii Nauk (Institute of Mathematics, Polish Academy of Sciences)

SUBMITTED: October 1, 1959
Card 3/3

X

(14) (b43)

Warsaw, Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Mathematiques, Astronomiques et Physiques, Vol. X, No. 3, 1962.

1. "A Problem in the Theory of Moduli." A. Ustaszewski, of the Institute of Mathematics, Polish Academy of Sciences (Instytut Matematyczny, PAN); English article, pp. 121-126.
2. "Note on a Theorem of Strohmer." P. J. H. Smith, of the University of Birmingham, England; English article, pp. 127-130.
3. "On a Certain General Boundary Value Problem of Elliptic Systems of Linear Differential Equations of the Second Order." J. Krasinski, of the Department of Mathematical Analysis, of the University of Warsaw (Matematyka i Statystyka, Uniwersytet Warszawski); Russian article, English summary, pp. 131-138.
4. "Integral Properties of the Logarithmic Potential and its Application." Z. Szmydt, of the Institute of Mathematics, Polish Academy of Sciences (Instytut Matematyczny, Oddzial Krakow, PAN); French article, pp. 139-144.
5. "Transformation of Parabolic Equations with Certain Applications to Markov Processes." I. D. Sokolovskiy; Russian article, English summary, pp. 145-152.
6. "A Note on Modular Spaces." J. J. Schreier and W. Orlik, of the Institute of Mathematics, Polish Academy of Sciences, Poman (Instytut Matematyczny, Uniwersytet Warszawski, A. Mickiewicza, Torun); English article, pp. 153-157.
7. "Gravitational Instability of a Self-gravitating Gaseous Cylinder in the Presence of a Magnetic Field Parallel to the Axis of the Cylinder." J. J. Schreier, of the Astronomical Observatory, Warsaw (Instytut Astronomii i Kosmologii, Uniwersytet Warszawski) and the Institute of Astronomy, Polish Academy of Sciences (Instytut Astronomii, PAN); English article, pp. 159-164.
8. "A Set of Integral Equations for the Determination of Poles on Rubicon Heights." J. J. Schreier and A. Jurkiewicz, of the Institute of Theoretical Physics, Warsaw

2 104W28

SZMYDT, Z.

Integral properties of the logarithmic potential and its applications. Bul Ac Pol mat 10 no.3:139-144 '62.

1. Instytut Matematyczny, Polska Akademia Nauk, Krakow. Presented by T.Wazewski.

SZMYDT, Z.

On some properties of the logarithmic potential. Annales pol math
12 no.2:115-137 '62.

1. Instytut Matematyczny, Polska Akademia Nauk, Warszawa.

S/044/63/000/002/008/050
A060/A126

AUTHOR: Szmydt, Z.

TITLE: On the approximation by harmonic polynomials on the boundary of a plane domain

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 22, abstract 2E98
(Ann. polon. math., 1962, v. 11, no. 3, 283 - 305; French)

TEXT: The author investigates the completeness of harmonic polynomials in the Banach space of functions defined on the boundary of a plane domain. In order to formulate the results obtained we shall introduce the following definitions. By Σ we denote a closed curve in the plane of the complex variable z ($z = x + iy$), having the parametric representation $z = z(s)$, $0 \leq s \leq L$, where $z(s)$ is a periodic function of period L ; $|z'(s)| = 1$ for $0 \leq s \leq L$; $z(s_1) = z(s_2)$, $0 \leq s_1 < s_2 \leq L$, if and only if $s_1 = 0$ and $s_2 = L$. One says that the curve Σ belongs to the class C^m (m is a non-negative integer) if the function $z(s)$ belongs to the class C^m . One says that the function $f(z)$ belongs to the class $C^m(\Sigma)$ of the function $f[z(s)] \in C^m$. By $D_m(\Sigma)$ we shall

Card 1/2

On the approximation by harmonic polynomials

S/044/63/000/002/008/050
A060/A126

denote the Banach space for functions $u(z) \in C^m(\Sigma)$ with the norm

$$\|u\| = \sum_{k=0}^m \max_{0 \leq s \leq L} \frac{d^k u[z(s)]}{ds^k}.$$

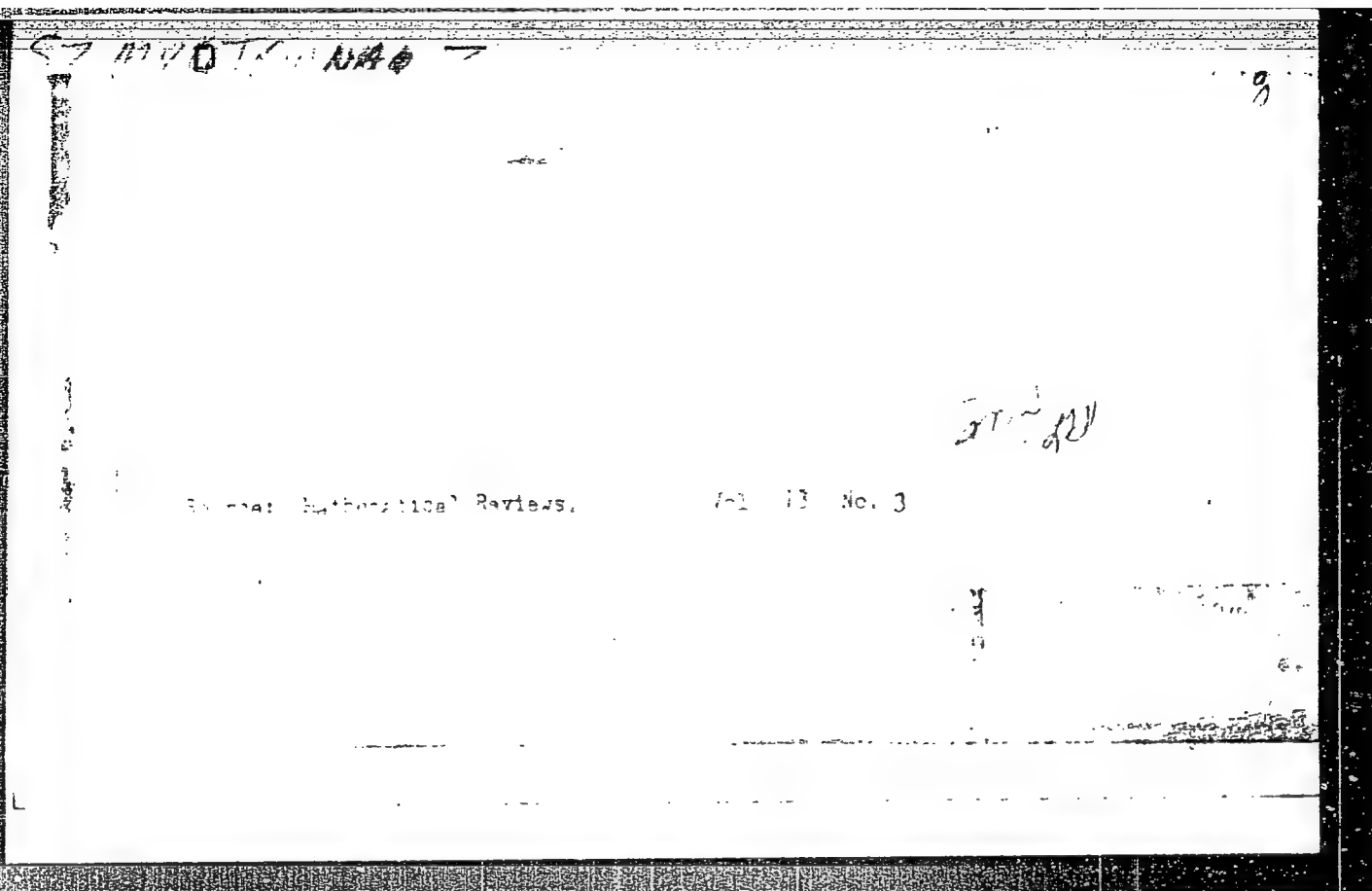
The following theorems are proven: Theorem 1. If a closed curve Σ belongs to the class C^{m+2} , then the system of harmonic polynomials is complete in the space $D_m(\Sigma)$. Theorem 2. If a closed curve Σ belongs to the class C^{m+2} , then the system of derivatives along the inner normal to the curve Σ of the harmonic polynomials is not complete in the space $D_m(\Sigma)$. It is also demonstrated that for $m = 0$ the conditions of Theorems 1 and 2 may be replaced by a more general conditions. Namely, the theorems remain valid if one assumes that the closed curve belongs to the class C^1_1 , i.e., when $|z'(s_1) - z'(s_2)| \leq N |s_1 - s_2|$, $0 \leq s_1, s_2 \leq L$, where N is an absolute constant.

Zh.N. Keshishyan

[Abstracter's note: Complete translation]

Card 2/2

SZMYDTOWNA, Z.



CZMYDTOWNA ; Z

U

Encl. 1, 2.

"Radio Review of the All-Union Voluntary Society for the Protection of the Army, Air Force, and Navy", P. 6, (RADIO SWATCH, Vol. 3, No. 8, August 1953, Warsaw, Poland)

34: Monthly List of East European Accessions (TEAL), IC, Vol. 4, No. 3, March 1955, Encl.

GARNUSZEWSKI, Zbigniew; SZMYGIN, Joanna

Intradermal trypan blue test as a criterion in the evaluation
of the stabilization of tuberculosis. Gruzlica 30 no.10:927-
932 '62.

1. Z Kliniki Ftizjatrycznej PAM w Szczecinie Kierownik: prof.
dr med. Z. Garnuszewski.
(TUBERCULOSIS, PULMONARY) (TRYPAN BLUE)
(SKIN TESTS) (PROGNOSIS)

GRZYBOWSKI, Stanislaw, mgr inz.; SZMYT, Jerzy, mgr inz.

Computation of earth currents in medium voltage networks.
Energetyka Pol 18 no. 8:238-243 Ag '64.

1. Technical University, Poznan (for Grzybowski). 2. Electric
Power Station, Gorzow Wlkp. (for Szmyt).

SZMYT, J.

Color vision, in the light of the physiologic theory of Ragnar Gran-
it. Polski tygod. lek. 5 no.14:542-546 3 Apr 1950 (CJML 20:1)

SZMYT, J.

Glare. Polski tygod. lek. 6 nos.23-24:767-768 11 June 1951.
(CIAM 21:1)

1. Theory of vision.

SZMYT, J.

Color vision in glaucoma. Przegl. lek., Krakow 7 no. 9:
338-348 1951. (CJML 21:3)

1. Warsaw.

SZMYT, Jacek (Warszawa, Bagatela 15/77)

Physiological value of luminescent light. Polski tygod. lek. 9
no.19:598-602 10 May 54.

(ILLUMINATION,
luminescent light, physiol. factors)

SZMYT, Jacek

Radiography of the lacrimal tract in pathological conditions;
radiographic picture in external dacryocystorhinostomy. Polski
przegl. radiol. 20 no.5:269-273 Sept-Oct 56.

1. Z Zakładu Okulistyki Instytutu Doskonalenia i Specjalizacji
Kadr Lekarskich Kierownik: prof. dr. med. W. Arkin.
(LACRIMAL APPARATUS, surgery,
dacryocystorhinostomy, postop. x-ray (Pol))

SZMYT, Jacek

Radiography of normal lacrimal apparatus. Klin. oczna 27 no.1:
37-42 1957.

1. Z Zakladu Ocznego I.D.S.K.L. w Warszawie Kierownik: prof.
dr. W. Arkin, i z Zakladu Radiologii A.M. w Gdansk Kierownik:
prof. dr. W. Grabowski. Warszawa, Bagatela 15, m. 77.

(LACRIMAL APPARATUS, radiography

(Pol))

SZMYT, Jacek (Warszawa, ul. Bagatela 15 m. 77)

Lacrimation tests. Klin. oczna 28 no.2:195-201 1958.

1. Z Zakładu Okulistyki I.D.S.K.L. w Warszawie. Kierownik: prof. dr med. W. Arkin.

(LACRIMAL APPARATUS, physiology
lacrimation tests, diag. & clin. value (Pol))

SZMYT, Jacek

Physiopathological hydrodynamics of lacrimation. Klin. oczna
29 no.3:291-296 '59.

1. Z Polikliniki Centralnego Szpitala Klinicznego M. S. W.
w Warszawie.

(LACRIMAL APPARATUS physiol)

SZMYT, Jacek, doc.dr.

Usefulness and aesthetics of eyeglasses. Problemy 18 no.8:569-
575 '62.

Sznyt, K

POLAND / Chemical Technology: Chemical Products and
Their Application. Synthetic and Natural
Medicinal Substances. Galenical Preparations
and Medicinal Forms. H

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 32465.

Author : Terpilowski, J., Sznyt, K.
Inst : Not given.
Title : An Application of Ionic Substitutes in the
Analysis of Pharmaceutical Preparations.

Orig Pub: Farmac. polska, 1958, 14, No 13, 198-200.

Abstract: A review. Bibliography of 70 titles.

Card 1/1

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001754520011-5"

COUNTRY : Poland
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No.

58091

AUTHOR : Terpilowski, J. and Sznyt, K.
INST. : Not given
TITLE : The Chelatometric Determination of Magnesium in
Certain Prescriptions

ORIG. PUB. : Acta Polon Pharmac, 15, no 4, 285-292 (1958)

ABSTRACT : A simple, rapid, and accurate chelatometric
method has been developed for the determination
of Mg in a number of widely used subscriptions.
Optimum conditions for the dissolution of various
mixtures have been determined together with the
most effecient ways of removing components which
interfere with the determination; the latter
purpose was achieved by the use of a column
packed with Amberlite IRA-400 anion exchange
resin and by the use of the hydrolysis reaction
(in tue case Bi salts).

From authors' summary

CARD: 1/1

SZMYT, U., WRZESINSKA, A.

The effect of activator concentration on the depth of the electron traps in ZnS. Bul Ac Pol mat 8 no.11/12:811-816 '60.

1. Instytut Fizyki Doswiadczalnej, Uniwersytet im. M. Kopernika, Forum. Presented by A. Jablonski.

(Zinc alloys) (Sulphur)

SZMYTOWNA, Maria, prof., dr.

Scientific and educational activities of Dr. Franciszek
Adamonis. (In memoriam) Acta pol. pharm. 20 no.2:101-108 '63.

1. Kierownik Katedry Chemii Nieorganicznej i Analitycznej
Wydziału Farmaceutycznego Akademii Medycznej w Poznaniu.
(OBITUARIES) (BIBLIOGRAPHY) (PHARMACY)

KASZAP, Andras; SZNAGYIK, Laszlo

Photometric color investigations in the Jurassic profile of
Labatlan. Földt kozl 90 no.1:114-119 Ja/Mr '60. (EEAI 9:8)
(Hungary--Geology) (Photometry)

ACC NR: AP6031249

SOURCE CODE: PO/0055/66/007/003/0299/0309

AUTHOR: Aleksandrowicz, Julian (Professor, Director, Doctor); Naskalski, Jerzy;
Sznajd, Jan; Urbanczyk, Jan

ORG: Department of Biochemistry, Third Clinic of Internal Medicine, Medical
Academy, Cracow

TITLE: Disorders of ribonuclease activity in chronic granulocytic leukemia

SOURCE: Acta medica polona, v. 7, no. 3, 1966, 299-309

TOPIC TAGS: rnase activity, leukemia, disease control, serology, enzymology, enzyme,
~~activity~~ blood disease, ribonuclease

ABSTRACT: Studies have been undertaken to elucidate the increased RNase activity in the urine of chronic granulocytic leukemia (cgl) patients. Included in the studies are 1) preliminary characterization of the factors responsible for serum and urinary nucleolytic activity; 2) search for interdependence between urinary and serum RNase activity and leukocytosis; 3) correlation between urinary and serum activity; 4) attempt to estimate the importance of the kidneys in disorders of RNase activity in leukemias on the bases of renal-function studies. Thirty-five clinical patients with cgl participated in the experiment; for

Card 1/3

ACC NR: AP6031249

comparison, there were 20 patients with lymphatic leukemia (ll) and 20 patients with myeloblastic leukemia (ml). The control consisted of 150 healthy people. The serum and urinary activity was determined by the orcinol method, and later by the spectrophotometric method. AcPase activity was determined by the Bessey method; creatine and serum nonprotein nitrogen were assayed by the methods of Jeffrey and Rappaport, respectively. The results were 1) Agreement of nucleolytic activity of serum and urine with well-known properties of ribonuclease was shown. 2) Serum RNase activity was markedly elevated both in the serum and in the urine of the patients. 3) AcPase activity was comparable in both groups. 4) There was a marked correlation between levels of serum and urinary RNase activity in the patients. In cgl, less pronounced correlation indicated disorders in the excretion of RNase. 5) RNase clearance values in cgl were shown to be neither dependent upon serum RNase activity nor related to the levels of leukocytosis. 6) A distinct correlation between leukocytes and RNase activity, described by the following formula, was shown:

$$Y = \frac{X}{1 + 0.000001X}$$

where Y is the serum RNase activity in $\mu\text{g/ml}$ and X is cgl leukocyte count in thousands. Maximal RNase activity occurred in range of low leukocytosis (around 3000) and highest leukocytosis (100,—300,000). Lowest values of RNase occurred

Card 2/3

ACC NR: AP6031249

in range of leukocytosis from 10,000—300,000. Experiments indicate that there is a state of equilibrium between RNase activity and level of leukocytosis in cgl. As a result, high levels of leukocytosis are accompanied by high RNase activity. The occasional drop in the leukocyte level is explained by a negative feedback relationship. This hypothesis supports the view that leukocytes are a source of serum RNase. The authors express their indebtedness to Miss Olga Sobajko for technical assistance. [WA-50: CBE No. 12]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 013/

Card. 3/3